Pre-Prod Connectivity Testing: Market Information Management (MIM) Application Programming Interface (API) Using MIM Web Services Toolkit (MWT)

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Table of Contents

Preface		2
TC01 -	Access MIM API Using MWT Toolkit	3
Additiona	l Resources	12

Preface

This document outlines the test cases to be executed as part of the pre-production connectivity testing phase for the applications that are impacted by the Market Renewal Program (MRP). The primary objective is to assess and validate the connectivity of the systems whose endpoints are changing in the environment.

Please ensure any anomalies, disruptions, or irregularities discovered while performing the preproduction connectivity test are reported via qTest or the Issue Log Template. This will contribute significantly to the overall improvement of the IESO tools.

Precondition:

- 1. Production API Credentials (username and password) to access https://webservices.ieso.ca/mim2
- 2. Must have the MWT.zip package available. MWT Toolkit available for download at https://www.ieso.ca/en/Market-Renewal/Market-Participant-Readiness/Technical-Reference-Materials . Navigate to *Market Information Management System* section and download the *MIM Web Services Toolkit (MWT)*.
- 3. Must have Java SDK 1.8.x installed on the machine. The Java version installed on a windows machine can be confirmed running the command java -version on Command Prompt.

TC01 - Access MIM API Using MWT Toolkit

 1 Extract MWT Toolkit files from the zip file downloaded into a folder of your choice on the windows machine. In this case the folder used will be: D:\MIM_MWT\ To extract: Right click the .zip file Select "Extract All" Set the path Click Extract 	Step	User Instruction	Expected Result
into a folder of your choice on the windows machine. In this case the folder used will be: D:\MIM_MWT\ Select a Destination and Extract Files To extract: 1. Right click the .zip file 2. Select "Extract All" 3. Set the path 4. Click Extract	1	Extract MWT Toolkit files	As shown below, specify the output path and select Extract .
the windows machine. In this case the folder used will be: D:\MIM_MWT\ Select a Destination and Extract Files To extract: 1. Right click the .zip file 2. Select "Extract All" 3. Set the path 4. Click Extract		into a folder of your choice on	×
D:\MIM_MWT\ Select a Destination and Extract Files To extract: Files will be extracted to this folder: 1. Right click the .zip file D:\MIM_MWT\mi-wsc-ieso-4.0.0-b1004 2. Select "Extract All" Show extracted files when complete 3. Set the path Click Extract		the windows machine. In this case the folder used will be:	Extract Compressed (Zipped) Folders
To extract: Files will be extracted to this folder: 1. Right click the .zip file 2. Select "Extract All" 3. Set the path 4. Click Extract		D:\MIM_MWT\	Select a Destination and Extract Files
1. Right click the .zip file D:\MIM_MWT\mi-wsc-ieso-4.0.0-b1004 Browse 2. Select "Extract All" Show extracted files when complete 3. Set the path Click Extract 4. Click Extract Image: Click Extract		To extract:	Files will be extracted to this folder:
 Select "Extract All" Show extracted files when complete Set the path Click Extract 		1. Right click the .zip file	D:\MIM_MWT\mi-wsc-ieso-4.0.0-b1004 Browse
 Set the path Click Extract 		2. Select "Extract All"	Show extracted files when complete
4. Click Extract		3. Set the path	
		4. Click Extract	
			Extract Cancel

Expected Result

2 Verify files have been extracted, and open the extracted folder.

↑ 🔄 > This PC > DATA_D (D:) > N	/IM_MWT > mi-wsc-ieso-4.0.0-b100	4 → mi-wsc-ieso-4.0.0	~	č
Name	Date modified	Туре	Size	
certs	2024/01/05 11:20 AM	File folder		
config	2024/01/05 11:20 AM	File folder		
📙 jar	2024/01/05 11:20 AM	File folder		
request-files	2024/01/05 11:20 AM	File folder		
response-files	2024/01/05 11:31 AM	File folder		
scripts	2024/01/05 11:20 AM	File folder		
README.md	2023/06/12 9:08 PM	MD File	4 KB	
README.pdf	2023/06/12 9:08 PM	Adobe Acrobat D	41 KB	

Expected Result

schedule

ws-client.properties

3 Open the request-files/ws-The ws-client.properties file will be in the request-files folder: client.properties file, using your **Notepad** application. « DATA_D (D:) > MIM_MWT > mi-wsc-ieso-4.0.0-b1004 > mi-wsc-ieso-4.0.0 > request-files ተ G ~ Date modified Туре Name Size bilateral 2024/01/05 11:20 AM File folder ddd 2024/01/05 11:20 AM File folder File folder forebay 2024/01/05 11:20 AM File folder misc 2024/01/05 11:20 AM File folder opres 2024/01/05 11:20 AM 2024/01/05 11:20 AM File folder rtem

3 KB

File folder

PROPERTIES File

2024/01/05 11:20 AM

2024/01/05 11:30 AM

Step	User Instruction	Expected Result						
4	Update the following	Update the 3 fields below with the API endpoint provided and your API password and username.						
	information in the file:	🗐 *ws-client.properties - Notepad — 🗆	×					
	<pre>ws.client.end.point = https://webservices.ieso.ca/mi</pre>	<u>F</u> ile <u>E</u> dit F <u>o</u> rmat <u>V</u> iew <u>H</u> elp	^					
	<u>m2</u>	<pre># Directories ws.client.cert.dir =/certs ws.client.input din =/certs</pre>						
	ws.client.password = [API Password]	ws.client.output.dir =/response-files						
	ws.client.username = [API Username]	<pre># Proxy server properties, only if needed to connect # ws.client.proxy.proxySet = true # ws.client.proxy.proxyHost = proxy.com # ws.client.proxy.proxyDert = 8080 # ws.client.proxy.proxyUser = proxyUser # ws.client.proxy.proxyPassword = theProxyPassword # Other Default Properties # ws.client.timeout.ms = 2000 # ws.client.output.file.identifier = -out</pre>						
		<pre># # Properties to be set by the end-user # ws.client.end.point = [end point url] ws.client.password = [API Password] ws.client.username = [API Username]</pre>						
		<pre># # List of Requests to be submitted/ Operations to be performed #</pre>	~					
		Ln 27, Col 1 100% Unix (LF) UTF-8						

Step User Instruction Expected Result 5 If required, update the proxy This is an optional step. Update the following fields to update the proxy server properties. If updated, remove the pound sign (#) before each setting. server properties in the same file. *ws-client.properties - Notepad \times Save the file if any changes File Edit Format View Help are made. # Directories ws.client.cert.dir = ../certs ws.client.input.dir = ../request-files ws.client.output.dir = ../response-files # Proxy server properties, only if needed to connect # ws.client.proxy.proxySet = true # ws.client.proxy.proxyHost = proxy.com # ws.client.proxy.proxyPort = 8080 = proxyUser # ws.client.proxy.proxyUser ws.client.proxy.proxyPassword = theProxyPassword # Other Default Properties # ws.client.timeout.ms = 2000 # ws.client.output.file.identifier = -out # _____ Properties to be set by the end-user # # _____ ws.client.end.point = [end point url] ws.client.password = [API Password] ws.client.username = [API Username] # List of Requests to be submitted/ Operations to be performed # UTF-8 Ln 19, Col 1 100% Unix (LF)

Expected Result

6	In that same ws- client.properties file, verify the	The row with the HealthCheckQuery.xml should active. Ensure all the remaining lines below it have	not have a pour a pound sign (#	id sigr) at th	(#) in front o e start as show	of it fo wn be	or it to elow.	o be	1
	HealthCheckQuery.xml is	ws-client.properties - Notepad			-	_		×	
	active under Miscellaneous	File Edit Format View Help							
	Queries.	The Tank (Trunk Trunk)							~
	Cave and close the file if any	#							
		<pre># List of Requests to be submitted/ Operations to be</pre>	e performed						
	changes are made.	#							
		#							
		" " " " " " " " " " " " " " " " " " "							
		ws.client.input.file = misc/HealthCheckQuery.xml							
		#ws.elient.input.file mise/ActASMp.xml							
		<pre>#ws.client.input.file = misc/MarketStatusQuery.xml</pre>							
		<pre>#ws.client.input.file = misc/MessageQuery.xml</pre>							
		<pre>#ws.client.input.file = misc/ResourceQuery.xml</pre>							
		<pre>#ws.client.input.file = misc/ForebayQuery.xml</pre>							
		#							
		# RTEM							
		#							
		#Submit							
		<pre>#ws.client.input.file = rtem/RtemSubmit.xml</pre>							
		#Query							
		<pre>#ws.client.input.file = rtem/RtemQuery.xml</pre>							
		#Cancel							
		<pre>#ws.client.input.file = rtem/RtemCancel.xml</pre>							
		#							
		# OPRES							
		#							
		" #Submit							v
			Ln 41, Col 47	100%	Unix (LF)	UTF-	8		

Step	User Instruction	Expected Result				
7	Navigate to the scripts folder.	The folder should have the ru	n-client.bat file.			
	→ < <p>MIM MWT > mi-wsc-ieso-4.0.0 + mi-wsc-ieso-4.0.0 + mi-wsc-ieso-4.0.0 + sc</p>		sc-ieso-4.0.0 > scripts	~	ē	
		Name	Date modified	Туре	Size	
		list-keystore.bat	2023/06/12 9:08 PM	Windows Batch File	1 KB	
		list-keystore.sh	2023/06/12 9:08 PM	SH File	1 KB	
		populate-keystore.bat	2023/06/12 9:08 PM	Windows Batch File	1 KB	
		populate-keystore.sh	2023/06/12 9:08 PM	SH File	1 KB	
		💿 run-client.bat	2023/06/12 9:08 PM	Windows Batch File	1 KB	
		run-client.sh	2023/06/12 9:08 PM	SH File	1 KB	

Expected Result

8 Select the address bar in File
 Explorer to select the path.
 Erase the path and type cmd.
 Then, press enter.

CMD			~
CMD Search for "CMD"			
B IISC-KEYSEDICIDAL	2023/00/12 5/00 FW	WINDOWS DOCTITIE	.:і КВ
list-keystore.sh	2023/06/12 9:08 PM	SH File	1 KB
populate-keystore.bat	2023/06/12 9:08 PM	Windows Batch File	1 KB
populate-keystore.sh	2023/06/12 9:08 PM	SH File	1 KB
limited in the second s	2023/06/12 9:08 PM	Windows Batch File	1 KB
- · · · ·	2022/06/12 0-00 DM	CLI Ella	1 10

The Command Prompt should open with the appropriate path as shown below.

Select the path and type the command "CMD" in the address bar.



Step	User Instruction	Expected Result						
9	Type the command "run-	Type the command as shown below:						
	Command Prompt and	🖾 C:\Windows\System32\cmd.exe — 🗆 🗙						
	press enter.	Microsoft Windows [Version 10.0.19045.3693] ^ (c) Microsoft Corporation. All rights reserved.						
		D:\MIM MWT\mi-wsc-ieso-4.0.0-b1004\mi-wsc-ieso-4.0.0\scripts≻run-client.bat						
10	Confirm the script ran	If run is successful, the results in the Command Prompt should look like this:						
	successfully.	D:\mi-wsc-ieso-4.1.0-b1013\mi-wsc-ieso-4.1.0\scripts>run-client.bat INFO: Started web service client INFO: Reading configuration info from:/request-files/ws-client.properties INFO: Endpoint: https://webservices.ieso.ca/emim INFO: Started processing request: misc/HealthCheckQuery.xml INFO: Version: 1:0:6, Status: eMIM web service is functioning properly: user: USERNAME, ms: 1705317614522 INFO: Finished processing request: misc/HealthCheckQuery.xml INFO: Finished client.						
		If the run is unsuccessful, the result should show a row with a message starting with ERROR.						

Additional Resources

Reference materials on the MIM API System are available here:

- MIM API: XSD
- MIM API: WSDL
- MIM Web Services Toolkit (MWT)
- MWT User Guide
- MIM Sample Request and Response files

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